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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/562,387

05/11/2006

Christiaan Michiel Ten Bruggenkate

ALG10220P-50

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32116

7590

04/30/2010

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER

500 W. MADISON STREET

SUITE 3800

CHICAGO, IL 60661

EXAMINER

EIDE, HEIDI MARIE

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

04/30/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/562,387

Applicant(s)TEN BRUGGENKATE,
CHRISTIAAN MICHIEL**Examiner**

HEIDI M. EIDE

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 8-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 8-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the polygonal, the hexagonal, and octagonal cross sections and the depth of the groove becoming larger in the direction of the apical side must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 8-10, 12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Münch (4,468,200).

Münch teaches an intra-osseous implant for placement in bone of a human body comprising at least one intra-osseous part 3 intended for placement in bone tissue having an apical side 13 and a cervical side 2 and composed of a body friendly material (see abstract), which part is provided on its circumferential surface with a screw thread 8 running in the direction of and ending at the apical end, and a support part present at the cervical side of the at least one intra-part is provided with multiple grooves 15 extending in longitudinal direction and over the entire length of the intra-osseous part, interrupting the screw thread into multiple interrupted screw thread parts, the multiple interrupted screw thread parts serving as retention elements capable of allowing the placement of the implant in longitudinal direction in the bone tissue but preventing the removal of the implant in opposite longitudinal direction out of the bone, the retention elements being provided with a profile exhibiting a shallow slope toward the apical side and a steep slope on the cervical side (figs. 1, 5). Münch further teaches the depth of the groove is greater than the height of the screw thread (is extends from the screw

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thread into the body of the implant, figs. 1, 3), the implant characterized in that the grooves are present in an equidistant manner in the circumferential surface (fig. 3), the intra-osseous part has a cylindrical or near cylindrical cross-section (fig. 3), the intra-osseous part becomes smaller in the apical direction (fig. 1) and the implant is a dental implant wherein the support part is provided with at least one bevel 11 on its circumferential edge (figs. 1-2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Münch (4,468,200) as applied to claim 1 above, and further in view of Alvaro (6,099,312).

Münch teaches the invention as substantially claimed and discussed above, however, does not specifically teach the width of the groove varies in the direction of the apical side to the intra-osseous part, the depth of the groove varies in the direction of the apical side of the intra-osseous part and more in particular becomes larger, the width of the groove widens in the direction of the apical side of the intra-osseous part.

Alvaro teaches an implant wherein the width of the groove 6' varies in the direction of the apical side to the intra-osseous part (fig. 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify. It would

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have been obvious to one having ordinary skill in the art at the time of the invention to modify the shape of the groove taught by Münch with the shape taught by Alvaro as a matter of obvious design choice, since Alvaro teaches the groove with a varied width (fig. 4) and a constant width (fig. 1) which is also taught by Münch. Alvaro teaches the depth of the groove varies (col. 2, l. 66, figs. 2-3, figs. 5-6), however, does not specifically teach the depth of the groove varies in the direction of the apical side of the intra-osseous part and more in particular becomes larger and the width of the groove widens in the direction of the apical side of the intra-osseous part. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the grooves taught by Alvaro to includes the width of the groove widens in the direction of the apical side and the depth of the groove becomes larger in the direction of the apical side since it has been held that such a modification involves routine skill in the art (*In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) MPEP 2144.04 IV B).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Münch (4,468,200) as applied to claim 1 above, and further in view of Misch et al. 5,954,504 (Misch).

Münch teaches the invention as discussed above, however, does not teach the height of the screw thread varies in the direction of the apical side of the intra-osseous part and more in particular becomes smaller.

Misch teaches the height of the screw thread varies in the direction of the apical side of the intra-osseous part and more in particular becomes smaller as illustrated in

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fig. 5. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the screw thread taught by Münch with the screw thread becoming smaller as taught by Misch in order to promote growth of new bone tissue.

Claims 11 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Münch (4,468,200) as applied to claim 1 above, and further in view of Kanomi et al (5,921,774).

Münch teaches the invention as substantially claimed and discussed above, however, does not specifically teach the intra-osseous part has a polygonal cross section, a hexagonal cross section or an octagonal cross section.

Kanomi teaches an implant comprising a polygonal cross section (col. 7, ll. 47-49). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the circular shape of the implant taught by Münch with the polygonal shape taught by Kanomi as a matter of obvious design choice since Kanomi teaches a polygonal shape and a circular shape as taught by Münch. Kanomi does not specifically teach the polygonal cross section is a hexagonal or octagonal cross section, however, it would have been a matter of obvious design choice to choose any known polygon shape, which includes hexagon and octagon, known in the art for the specific polygonal cross section.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Münch (4,468,200) as applied to claim 1 above, and further in view of Lonca (4,722,688).

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Münch teaches the invention as substantially claimed and discussed above, however, does not specifically teach the support part is positioned under an angle on the intra-osseous part with respect to the direction of the implant.

Lonca teaches the support part is positioned under an angle on the intra-osseous part with respect to the direction of the implant as illustrated in figs. 4a-4b (col. 4, ll. 20-23). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the location of the support part taught by Mena with the angled location taught by Lonca in order to provide a prosthetic in desired position preferred by the user.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-6 and 8-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEIDI M. EIDE whose telephone number is (571)270-3081. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heidi Eide
Examiner
Art Unit 3732

/Heidi M Eide/
Examiner, Art Unit 3732

4/26/2010

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732